

## ABSTRACT

A catalyst that can be used for the production of hydrogen from hydrocarbon fuels in steam reforming processes contains an active metal of, e.g., at least one of Ir, Pt and Pd, on a catalyst support of, e.g., at least one of monoclinic zirconia and an alkaline-earth metal hexaaluminate. The catalyst exhibits improved activity, stability in both air and reducing atmospheres, and sulfur tolerance.